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WEEKLY STATION REPORTS

OF THE OFFICE OF

LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

APR 10 1926

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REPORT FOR WEEK ENDING APRIL 10, 1926.

HAVRE:

The past winter was unusually mild with very light precipitation, especially since about October 20. There was very little killing of either grain or alfalfa.

Early in March some of the early grass started growth and few of the early bushes started to leaf. The last of March and the first week of April were cold so that there has been no vegetative growth until the 9th.

Some field work started on the 22nd but this was stopped the last week in March. While no seeding has been done on the station a few farmers in the locality have seeded wheat.

The surface 4 inches of soil is generally dry from the winter but the subsoil has more moisture from the rains of the last fall than is usual at this season.

A severe wind on March 23 caused a great deal of soil blowing. This damaged winter wheat much more than the winter conditions.

The following is the precipitation for the winter months:

November	T
December	.36 inch
January	.34 "
February	.36 "
March	.12 "

The minimum temperature for the winter was -23 on December 26.

HUNTLEY:

The past winter, taken as a whole, was one of the mildest in the history of the state, according to reports of the Weather Bureau. Beginning with November, the mean temperatures for all months up to and including March were about equal to the normal or were above normal. The mean temperature for December was the highest since 1900 while that for February was the warmest since 1895. The mean temperature for October, on the other hand, was the coldest in 31 years. It was during this month that the minimum temperature of the winter, 15 below zero, was recorded at this station.

Huntley, continued:

Precipitation for October and December was above normal and much of it occurred in the form of rain. Since December, precipitation has been less than the average. Snowfall was light, and generally melted soon after falling, thus leaving the ground bare most of the winter. Notwithstanding this lack of protection, winter wheat and rye survived with good stands, in most cases, and there was little injury locally from soil blowing until March 23. On this date an unusually hard wind swept this part of the country continuously for 12 hours, giving us our first experience of serious soil blowing.

Farmers have reported their loss of winter wheat due to the storm of March 23, as ranging from a small percentage to a total loss, depending upon the location of their fields and the seed bed preparation. As a rule, winter wheat sown on corn ground or grain stubble did not suffer as greatly as that on fallow. This was noticeable, to some extent, on the plats as well as on larger fields. The wheat on the plats suffered as much from the soil lodging in the stubble as it did from actually blowing out. The full extent of the damage cannot yet be seen as since the storm the weather has been unseasonably cold with frequent showers and snow storms the result of which is still problematical.

Field work was begun March 15 with the working down of fall plowed ground and the preparation of land for small grains. This line of work has been completed and planting will be done as soon as the ground is dry enough. In some of the spring plowed plats it was noted that the plow turned up dry soil from the bottom of the furrow, indicating that the need of moisture is already a serious factor.

Maximum temperature 64, minimum 9; precipitation .33 inch.

SHERIDAN:

Following the severe weather of October the remainder of the winter was quite mild. Precipitation was slightly above the average for November and December and slightly below the average for January and February, while for March it was considerably below. The lowest temperature recorded was -10 degrees in January, and throughout February and March no temperatures below zero were recorded. Some plowing was done in this section during every month of the winter. At no time during the winter was the ground frozen to a depth of more than a few inches.

Growth of some of the perennial grasses was noticeable by the middle of March. By the latter part of March crested wheat grass had made a growth of 5 or 6 inches. Considerable field work was accomplished during that month. Russian thistles were cleared from the rotation field and from the most of the land intended for plats this year. Plowing of the early spring plowed plats of the rotation field was completed March 27 and a portion of the fall plowed plats were cultivated with the duckfoot cultivator.

Sheridan, continued:

Severe weather accompanied by light flurries of snow occurred the last of March and the first week of April. No field work was accomplished between March 27 and April 9. Temperatures for the last five days of March were the lowest yet recorded at the station. Temperatures during the first week of April were low but not lower than has been recorded before. The last day of March was the coldest of the month, one degree above zero being recorded.

The 1st date of seeding spring wheat was seeded March 23. Field work was resumed yesterday and seedings of wheat, oats, and barley were seeded.

Winter wheat came through the winter with a good stand. Heavy soil blowing the last few days of March injured a few of the fallow plats to some extent.

Maximum temperature, for April to date, 62, minimum 12; precipitation .29 inch.

JUDITH BASIN:

The past winter has been unusually mild and very little precipitation has been received. There were only four days since November 1 in which the temperature fell below zero, the lowest temperature recorded being -13°.

Soil blowing has been exceptionally bad and without a doubt a considerable portion of fall wheat seeded with an ordinary drill has been blown out. Fall wheat seeded with a furrow drill has apparently survived the winter in a fairly good condition, but an exceptionally severe wind and dust storm on March 23 cut off and killed back all growth to the surface of the ground. Many fields which had made a growth of 3 inches or more prior to March 23, now are completely bare of vegetation, but the wheat will doubtless again resume growth with the advent of warmer weather. A number of the rotation plats were covered to a depth of from 6 to 8 inches by wind-blown soil from a neighbor's field. The surplus soil was cleared from the various plats in Field A during the first part of March, but the dust storm on March 23 will make it necessary to clear many of these plats again.

Plowing on the rotations was commenced March 23, but the commencement of stormy, cold weather on March 25 put a stop to all field work and the ground has been covered with snow during the greater portion of the time the past two weeks. Warmer weather has prevailed during the latter portion of the present week and the snow has now practically all disappeared. If the present favorable weather continues, it will be possible to resume field work the fore part of next week.

Director F. B. Linfield was a visitor at the station on April 6 and 7.

Maximum temperature 54, minimum 5; precipitation .20 inch.

DICKINSON:

The fore part of the week was cold with temperatures near freezing each night. The last two days have been warmer and most of the frost is now out of the ground.

Tillage was started on the rotations on the afternoon of the 10th. There was enough moisture in the top soil so that stubble land plowed very well but no water is available lower. Fall plowed plats were very rough and did not work down well. Germination of grains will be spotted unless rain is received.

All rotation plats were lined up by a surveyor April 1-3, and permanent markers have been set in concrete.

The past winter has been one of the mildest of record in the state. The January temperature at Dickinson was 9.2 degrees above normal, February was 13.2 and March 3.6 degrees above normal.

Precipitation was very light during the winter as well as during late summer and the fall of 1925. The total precipitation for the nine months, July to March, was 5.70 inches or 3.08 inches below average.
Maximum temperature 66, minimum 2; precipitation .20 inch.

MANDAN:

Agronomy

The weather conditions of the past winter are the most favorable in the climatological history of the state. The mean temperature was about 10° above normal. There were no severe storms. The precipitation was below normal. The total precipitation for January, February and March was .97 of an inch, as compared with the 50-year mean of 1.88 inches for this section. Most of this shortage came in March.

Weather was exceptionally favorable about the middle of March, and by the 20th, some field work and seeding of wheat was being done in the country. A seed block of wheat was seeded on the station on March 22. A couple of days later the weather turned much colder, and temperatures remained below normal until about April 8.

All weeds in the rotations have been cleaned up and burned. The listed plats were worked down with the disk cultivator. The south field is being plowed today. The ground is still frozen where there is moisture in the soil. Field work should be well under way next week.

Mandan, continued:

The soil is very dry at the present time. It is in much the same condition as last year at this time. The season is now about 10 days later than last year. If weather conditions remain favorable, seeding should be done at about the average date.

The indications are that most of the winter wheat in the rotations has again failed to come through the winter. Winter rye seems to be in fair condition.

Maximum temperature 61; minimum 10; precipitation, Trace.

Cooperative Grazing Experiment

On April 5, 77 steers were cut out of a bunch of 158 for the grazing work this year. The 77 will average about 725 pounds per head at present, and should weigh more when they are started in the pastures. The cattle were wintered on the river bottoms near Mandan. They were well fed during the winter. They will be delivered at the pasture about May 1. Some native vegetation started growth by March 20. Western needle grass, the two sedges, and Artemisia frigida showed new growth at that time.

Horticulture

Fruit breeding work in the greenhouse is now over. A fair set of most fruits appears to have been obtained from the crossing work.

Spring pruning is now almost completed. At this time there does not appear to be nearly as much winter injury as was the case last year.

Some of the seeds for the gardens and vegetable breeding plats have been planted in flats in the greenhouse.

The grounds are now being raked and cleaned up.

Arboriculture

To allow the digging of the tree nursery stock at as early a date as possible, the winter mulch has been removed, and it is hoped the ground will thaw out very quickly.

A circular letter was mailed on the 6th to all shelterbelt applicants whose plantings for one or another reason were postponed to 1927. Each applicant was requested to notify us as to whether he would be able to prepare his land during the present year in accordance with the "Land preparation instructions" furnished him, so that a planting could be furnished in the spring of 1927.

BELLE FOURCHE:

The past winter was above normal both in precipitation and temperature. The December precipitation was above normal and that for January was by far the highest on record. The drifting snow kept most roads impassable for cars the greater part of six weeks. February was mild and dry, and some thawing took place practically every day of the month. No day was warm enough, however, for any great amount of thawing to take place and the snow disappeared by imperceptible degrees. By the end of the month there was only about two inches of snow left on the ground and this disappeared before the middle of March. The soil was probably not frozen to a depth greater than six inches anywhere there was a snow cover at any time during the winter. The water from the melting snow was able to pass into the soil and the heavy snowfall disappeared without run-off. By the middle of March fields were generally dry and field work became general.

The first land preparation on the dry land plats was done on March 17 and within the next few days all of the plowing, disking and harrowing preparatory to seeding was completed. Seeding was delayed until the end of the month when the oats, wheat and barley were planted. The seed bed was generally in good condition. The soil in the spring plowed plats worked down unusually well.

The winter grains sprouted but did not come up in the fall of 1925. They commenced to come up before the middle of March and it now appears that there will be a good stand on almost all plats.

The weather of the past week was cold and disagreeable. [illegible] Snow flurries occurred on practically every day but the amount of snow that fell at any one time was small. The maximum temperature for the week was 38, minimum 6. Precipitation .15 inch, all in the form of snow.

The precipitation for the first three months of the year is as follows: January 1.67 inches, February .19 inch and March .24 inch.

ARCHER:

The week has been marked by cool, cloudy and foggy weather with slight precipitation. No field work has been undertaken because the soil was too wet. Due to the sickness of farm laborers little of any kind of labor was accomplished. All potatoes for sale have been hauled to Cheyenne, the teams returning with loads of building material for the roofing of the dairyman's house.
Maximum temperature 32, minimum 22; precipitation .22 inch.

NORTH PLATTE:

The winter and spring have been unusually dry and open. Some moderately heavy snows occurred in December but these disappeared before January 1, and only light flurries have occurred since. The minimum temperature recorded at North Platte was -3 degrees. Below zero temperatures were recorded but three times in December and the low record since that time is 8 degrees above zero.

North Platte, continued:

Field work was begun during the first week in March. Spring grains on the D. L. A. project were seeded March 25-26. Cool, cloudy weather has persisted since that time and no plants have emerged.

Winter wheats came through the winter in good shape. By March 20 growth had started well and the plants seemed to be well established. On March 24 a terifric wind occurred. A greater amount of soil blowing took place than has been the case in the 11 years the writer has been at this station. During the next week high winds and low temperatures continued. The new growth on all winter wheat was completely dried up. Practically no further growth has started and it seems very likely that a number of plats will have to be reseeded. Rye was but little effected and the green growth on these plats now contrasts sharply with the brown dried up plants on the wheat plats.

AKRON:

Winter wheat seeded last fall emerged to stands very late and had not attained any considerable size before cold weather inhibited further growth. The winter passed with a fair amount of snow, well distributed. The snow melted about the 20th of February. Since that time there have been no appreciable rains or snows. There have been, however, many hard winds which caused dust storms. The first of these occurred February 25, another February 28, another March 20 and the last to date, and the worst, March 23-24. As a result of the winds, winter wheat in this immediate region has been damaged, many fields or parts of fields blowing away carrying the wheat roots with the soil. The station west fence line has from 16 to 18 inches of drifted soil from the field immediately to the west. Station wheat was not damaged until the blow of March 24. This wind sprang up during the night and by the morning of the 24th some of the station soil was moving so vigorously that it could not be checked. The wheat damaged by this wind, though damaged, has not been killed, and it remains to be seen whether it will revive. Weather has been cold and damp since the dust storm of March 24 and wheat has made no growth.

The early spring has been favorable for field work. The plowing for the early spring seeded small grains was completed March 26. The peas and the barley were seeded March 27. The spring wheat was seeded March 29, and the oats on March 30. The Cereal Varieties were seeded April 9 and 10.

It has been necessary to work all the fallow strips not seeded and all other open ground to prevent soil drifting. Rye on the sheep rotation field is making nice spring growth and now promises pasture within the next ten days.

Maximum temperature 72, minimum 21; precipitation, Trace.

COLBY:

The past winter has been quite mild with very little snow or rain. The temperatures were above normal the latter part of February and the first half of March, so that early seeding of spring grains was accomplished. The lack of sufficient moisture in the surface soil has slowed up the emergence of the spring grains so that just here and there a leaf of the barley, oats, and spring wheat shows. Quite a good deal of the spring grains have germinated and are just slowly trying to emerge. A snow the last of March and the first of April furnished moisture to reach almost to the spring seeded grains. It is doubtful if they would have emerged had there not been a rain of 0.26 inch this week. With warmer weather than we have had since the snow a good emergence of the spring seeded grains should be assured.

Winter wheat came up to a good stand in the fall of 1925 and went through the winter in good condition. The dry surface soil was beginning to tell on the wheat previous to the snow and rain mentioned above. There was some soil blowing in February that thinned out the wheat in spots. This did not affect more than three or four plats on the project. There is not more than a normal amount of moisture in the wheat soil at the present time. Soil moisture samples were taken the first of the week on the same eight wheat plats sampled last season. There is less moisture in the soil than there has been for any spring for some time.

Fruit trees bloomed early, apricot, peach, and pear, so that there will be no fruit on these trees. The spring started about as early as last spring if one can judge by the time that the apricots started to bloom.

Winter wheat does not look especially promising at this time. Normal moisture or above (rightly distributed) from nowon would increase our prospects considerable for winter wheat. Most fields have been fairly severely punished to date for the size that the plant is.

HAYS:

Generally the past winter was very mild. Only two exceptionally cold spells occurred, and these were not extremely cold but occurred at unusual times. The first was during the month of October and the second was the last week in March. The latter would not have been considered severe except that it followed some unusually warm weather.

The temperature dropped below zero only three times during the winter, the minimum temperature for the winter being six degrees below zero. There was no real severe storms or blizzards.

Hays, continued:

October, especially the last half of the month, was unusually cold and disagreeable for October. November to February, inclusive, were very mild for those months, and March was warm up to the 24th. Maximum temperatures of 70 had been reached or exceeded six days previous to the 24th. This warm weather was followed by a drop in temperature which remained below freezing from 8 P.M. March 27 to 10 A.M. the 31st. The minimum temperature March 31 was 11 degrees. The sudden change was very hard on all early fruits, most of which were either in bloom or nearly at that stage. It was also hard on the first growth of alfalfa which was three or four inches high.

The winter precipitation was below normal during the months of December and January, and above normal during November, February and March.

The mild weather during the winter together with plenty of surface soil moisture has developed a very heavy growth of winter wheat. It is considerable in advance of what it should be at this time of the year in spite of the slight check in growth caused by the cold weather late in March. On well prepared ground the wheat covers the ground and is very thick. On late plowing and other seed bed preparations where the work was deferred until late, the growth is neither so heavy nor is the stand so good.

Spring small grains were sown on the project March 9 during the fine spring weather, and was coming up nicely when the freezing weather returned at the last of the month. Minimum temperatures of 13, 12, and 11 occurred. In spite of the severe freezing, the spring small grains now look very promising for good stands on all plats. The cloudy and damp weather that has prevailed during the past week has been very favorable for all the small grains.

During the past week the ground has been too wet most of the time, because of light showers, to permit of any field work. Trimming of the winter wheat plats has been the order of the day when it has been dry enough to get in the field.

Ground is in excellent condition this spring for seeding of all crops.

Although there were a few scares about soil blowing, there was no damage caused in this vicinity by blowing. There has been sufficient moisture to keep the soil in good condition so blowing could easily be prevented.

GARDEN CITY:

Winter wheat came through the winter in excellent condition and is looking good at the present time in spite of the fact that only 3.19 inches of moisture, received on 16 different days, have been recorded since wheat was seeded.

Garden City, continued:

The past winter was a mild one. No temperatures below zero were recorded. Except for one or two cold periods of short duration, the months of January and February were very warm. The last week in March and to the present date in April the weather has been cold and disagreeable. A small amount of moisture in the form of snow or very light showers has been received. A temperature of 11 was recorded on March 31 and temperatures of freezing or below have been recorded practically every night since that time. This last cold weather has tended to retard wheat growth which is no doubt of benefit especially to that growing on fallow.

Little field work has been accomplished thus far this spring. Spring wheat, oats and barley were seeded on March 26, but have not yet emerged. Spring plowing will be done next week if weather conditions permit.
Maximum temperature 47, minimum 25; precipitation .05 inch.

DALHART:

The winter has been unusually light over this section of the panhandle. Very little precipitation in any form was recorded from October to March 31. Most of the winter has been delayed until the present time. The first real blizzard came on March 31 and lasted one day and night. The wind blew so hard that it was practically impossible to get a correct measurement of the snow either with the gage or by measurement. The melted snow from the gage netted 0.34 inch for the entire amount of that blizzard. The fields held the snow in good shape while roads were bare in places and badly drifted in other places. This snow lasted for several days and was taken up by the soil as rapidly as it melted. Some unsettled weather mixed with fair weather prevailed for about a week. The second blizzard started on the morning of the 9th of April. It started as a mist which lasted until about 1 p.m. when it turned to snow of large flakes and very wet. The snow melted as fast as it hit the ground for several hours. About dark the wind came up somewhat and the snow changed to finer particles. The snow continued during the night and at this writing, (11:30 a.m., the 10th), is still snowing. The melted snow recorded at 8 a.m. today was 1.09 inches. An average from 114 measurements showed a depth of 7.5 inches of snow on the ground at 8 a.m. There is very little drifting in this storm and the temperature is barely below freezing.

Most of the work during the week has been confined to seed cleaning, tree and ornamental planting, planting of a windbreak along the south fence, feed grinding and other odd jobs. No field work was accomplished this week on account of moisture. Preparation for planting will be commenced as soon as conditions will permit.

TUCUMCARI:

The past winter has been characterized by unusual climatic conditions:- December and February were each 5 degrees above the twenty year average mean temperature for these months, while January and March were 4 and 6 degrees below the long-time average mean.. During the months November to February, inclusive, only 0.73 inch of precipitation was received, making this one of the driest winters on record. March, with a total of 2.04 inches, was the the third highest March on record, while to date this month we have received 1.52 inches in rain and snow.

Prospects are very possibly the best they have ever been for a winter wheat crop on the plains to the south of Tucumcari. Sufficient moisture is now present to produce a 10 to 15 bushel crop, while with normal rainfall during the next two months this figure may be easily doubled. Farmers are enthused and will no doubt plant a lessened acreage of row crops, although conditions will be ideal for row crop planting. Last year not enough wheat was produced in this county to seed back, so wheat was shipped in for seeding. Apparently those who furnished seed to the farmers for a share of the crop were fortunate, although speculators have lost on this venture for several years.

Ranges are in fair condition and grass is growing slowly. With warm weather, ranges should be in excellent condition before the close of the month. Cattle wintered in fair condition and with the exception of a cold snow and sleet in late March and a wet snow this past week the weather has been very favorable for livestock wintering.

A temperature of 7 degrees on the morning of March 30 killed all peaches and plums in this vicinity and spared only a few apples. Cherries were in some cases hurt, but it now appears a good crop remains unharmed. Peaches and plums were in full bloom March 18-to March 26, while cherries have begun to open within the past three days. The cold period at the close of March broke all records, the coldest temperature previously recorded after March 20 being 14 degrees.

Steers on feed at the station are doing normally well, but all lots are falling below a 2# per day gain, although lots 1 and 3 have both averaged 1.92# over the five month period ending March 22. Lot No. 2, fed cowpea hay, is below the other lots in gains, for the cowpea hay was of inferior quality last season, due to continuous wet weather during harvest.

Practically no field work has been done on the station, for just as the lister was started, about two weeks ago, the wet season began and since that time there has been no chance to perform field work. This lateness in beginning field work will necessitate putting all available teams in the fields just as soon as possible.

Maximum temperature 75, minimum 30; precipitation 1.52 inches.
Average hourly wind velocity, 6.9 miles.

BIG SPRING:

Weather conditions during the past winter have been rather unusual in that the temperature has been very mild for the most part and the usual high winds have not been prevalent. 2.18 inches of rain fell during the month of March, as compared with a twenty-three year average of .80 inch. This soaked up the subsoil in fairly good shape and made winter preparation of the land comparatively easy. As a result the farmers in this vicinity have their land prepared in better shape this year than in several years past.

The month of March was very warm until the last few days when freezes occurred on the 30th and 31st; at this time the temperature dropped to 25. This freeze killed all of the peaches, and all of the plums with the exception of the Weaver variety. The cherries had not blossomed at that time, so there is still some prospect for a crop of them.

The work during the past week has consisted of plowing under a cover crop in the vineyard and orchard, and in finishing up of the spring plowing of plats.

Maximum temperature 80, minimum 35; precipitation 0.

LAWTON:

Adverse weather in the fall of 1925 prolonged and delayed completion of field operations until mid-winter. However, the abundant moisture insured satisfactory growth and vigor of small grains. Although growth was rather late and only moderate, considerable pasturage was obtained and this condition, coupled with mild winter temperatures resulted in a favorable winter period for live stock.

During a considerable portion of January the weather was suitable for the preparation of ground for oats seeding, which was done early in February. The acreage of oats is probably as large as in any year in the previous history of the southwestern part of the state. Good stands were obtained and the crop was well rooted especially where early seeding was practiced. The crop withstood snow and hard freezes in March in excellent shape.

Ten varieties and a 9-acre field of Fulghum were seeded on the station from February 3 to 9. Rate and date work with oats was begun February 2 and continued to March 10.

Lawton, continued:

Winter barley made excellent growth during the winter and early spring and is well advanced at the present time. Varieties seeded as late as November 14 did not show injury from winter temperatures. Winter Turf oats also seeded on November 14 for observation is in a very satisfactory condition.

Corn was planted March 26, but weather since that time has been too cold to permit emergence. The grain is sprouted and has a chance to emerge provided the present cold, wet weather does not continue too long. Although the corn acreage in this county is usually small, it is likely that much replanting will be necessary.

Fall seedings of alfalfa are in optimum condition and the present supply of soil moisture almost insures a good crop of hay from the first cutting.

On April 8 twenty strains of sweet clover were seeded in the nursery. The two strains, Ohio White No. 2465 and Suaveloeus No. 27474, which evidenced marked superiority in 1925, now have a large margin in spring growth as compared with the remainder of the nursery.

The experimental planting of ornamental shrubs and trees was considerably increased this spring and everything is starting off under favorable soil conditions. A moderate amount of Chinese Elm seed was produced and gathered. Several beds were planted but germination may be rather poor due to late freezes which injured much of the seed.

Some snow and hard freezes late in March and early in April entirely eliminated the possibility of fruit production in this part of the state in 1926 except grapes and berries.

As a whole, farm operations are in a cheerful and encouraging condition. Past experience justifies a forecast of average production of small grain. Spring planting of row crops will be done under circumstances that are favorable. In spite of the fact that a campaign to reduce the cotton acreage has been in operation for some time, a normal acreage will likely be planted. Precipitation for the year is as follows:

January	1.33	inches.
February	0.00	"
March to date	1.25	"

WOODWARD:

The winter was rather mild and open, with very little moisture. The temperatures during February were very moderate. This caused the winter small grains to grow rapidly and by early in March wheat over this section was beginning to show serious lack of moisture, especially where it had not been pastured heavily. Some small showers were received. These relieved the situation, and in connection with warm weather promoted growth. The unseasonably warm weather also brought early blooming varieties of fruit into bloom early in March. During the last few days of the month there was a severe blizzard, with the heaviest snowfall of the season, 6 to 8 inches. This was accompanied by very low temperatures for this time of the year, 19° on March 30, 13° on the 31st, and 21° on April 1. These temperatures in connection with less severe freezes a few days earlier, of course, killed all prospects for any apricots and peaches, also killing the crop on many varieties of plums. Many of the buds on apples, cherries and grapes were also killed. The wheat, rye and alfalfa were also frosted considerably, but not as much as would have been the case had not all but the tips of the plants been protected by the snow. The past few days have been cloudy with some fog, and threatening rain. Yesterday it finally settled down to a steady drizzle which netted over one half inch up to 8 a. m., and at noon is still falling steadily.

Considerable new shrubbery and shade and fruit trees have been planted this spring, also several new varieties of grapes.

We had a prospect for another good crop of Chinese Elm seed, but it was frozen so that it will probably amount to nothing. Most of the early blooming flowering shrubs, such as Spirea Van Houti, were frozen so they will not bloom.

Considerable field work has been done at times during the late winter and early spring. Several fields have been plowed and some corn has been planted during the week.

Maximum temperature 74, minimum 29; precipitation .58 inch.
Average hourly wind velocity 5.8 miles. Precipitation January .54 inch, February .11 inch, March 1.89 inches. Total precipitation for year to date 3.11 inches.

NOTES:-

Attention is invited to the following memorandum, addressed to the Heads of Offices, written by the Chief of Bureau, B.P.I., with the request that same be called to the attention of the field men of this office:

"Gentlemen:

My attention has been called to a circular letter being distributed by the MacMillan Company, in which they urge the purchase of books by field men, and suggest further that they will be glad to ship books to the field men upon approval.

"While books may be purchased for field use from appropriations available for our investigational activities, these purchases may only be made upon request through the Washington office. All letters of authorization specifically preclude the purchase of books. Where library facilities are not available and a field man requires books for his work, he should take the matter up with the head of his office in Washington, and any books purchased must be upon requisition, supplemented by a statement showing that the book is for field use, and where it is to be filed. If purchased, upon arrival it will be carded by the Bureau Library and turned over to the office for forwarding to the field.

"I shall appreciate it if you will see that this memorandum is promptly called to the attention of your field men.

(Sgd.) Wm. A. Taylor,
Chief of Bureau."

The following memorandum, addressed to the Heads of Offices, written by Mr. F. E. Meloy, Assistant in Charge of Property, is called to your attention:

"Under date of July 16, 1926, you were advised by a memorandum from this office that the Ford Motor Company had designated this Department as a National Fleet owner and entitled, as such, to a 25 per cent discount on Ford parts over the counter of any authorized Ford Dealer, and to a discount of 15 per cent on parts installed in dealers' shops.

"You are now advised that the Ford Company has modified these discounts and will, in future, allow a discount of 20 per cent on parts installed in Ford Dealers' Shops and a discount of 20 per cent (25 per cent where monthly purchases average $50 or more) on parts purchased without installation. This information should be promptly communicated to all field officers operating Department owned Ford automobiles of any type or class."

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WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

APR 17 1926

REPORT FOR WEEK ENDING APRIL 17, 1926.

HAVRE:

The week ending April 17 was characterized by warm dry weather. A maximum temperature of 80 degrees was recorded Friday afternoon, followed by a minimum of 31 degrees early Saturday morning. The rainfall is much below normal for April, only .02 inch being reported to date.

Spring plowing for small grains in the rotation field was completed. Ample moisture was present to do good plowing and with the exception of fall plowing, which is somewhat cloddy, all methods have worked down in good condition.

Winter wheat plats which apparently were severely injured by soil blowing on March 23 revived greatly and indications are favorable for better than the usual stands. Winter rye is making excellent progress for this season of the year.

The first date of seeding wheat and oats was made this week as well as early plantings of alfalfa and grasses. With the warmer weather considerable wheat has been seeded in parts of Hill County.

JUDITH BASIN:

Warm weather has prevailed during the greater portion of the past week and only one light rain was received. Warm winds the past few days have rapidly dried the soil and work in the field has again commenced.

Field operations have been largely confined to scraping wind blown soil from various rotation plats. Plowing of all plats on the rotations for small spring grain and plowing of a 30-acre field have been completed. Fallow land on the Cereal project has also been double-disked and harrowed.

Growth of winter wheat has commenced and most of the fields seeded with a furrow drill have apparently survived the winter with but very little reduction in stands. Winter injury on fields seeded with an ordinary drill, however, appears to be quite extensive in many instances. Fall wheat sown with a furrow drill on the rotations is still in a very doubtful condition on the continuously cropped and some green manured plats, but has survived with perfect stands on fallow and corn stubble. Alfalfa and sweet clover have commenced growth and crested wheat grass and brome-grass are about three inches high.

Professor Clyde McKee, of the Montana Experiment Station, visited the station on the 16th and 17th.

Maximum temperature 77, minimum 33; precipitation .4 inch.

HUNTLEY:

The past week has been as unseasonably warm as a week ago was unusually cold. Seeding operations have progressed without interruption and, with the the exception of flax, all of the early sown crops have been planted in the rotation and pasture experiments.

Winter wheat on large fields in this locality appears to be recovering to some extent from the "blow-out" of March 23. In some patches the surviving stand is very thin but in most instances where the crop was well rooted the stand seems to be good. Winter wheat and rye on the plats suffered more from soil drifting from the roads over the plats than it did from actual blowing out. Stands appearing at present are very poor, being not only thin, but patchy.

Alfalfa and brome are making a slow growth. These crops suffered to some extent by being covered with soil in places.

Station visitors during the week included Director Linfield and Professor McKee of the Montana Station.

Maximum temperature 86, minimum 28; precipitation 0.

SHERIDAN:

The week has been quite favorable for field work. Preparation of the rotation field for seeding of early grain crops was completed the 13th. The wheat, barley, and field peas were seeded in this field the 14th, and oats were seeded the next day. Another date of seeding for wheat, oats, and barley, and the varieties of spring wheat were seeded the 16th, and the varieties of oats and rates of seeding spring wheat and oats on the 17th.

The ground is in very good condition for seeding. Spring plowing worked up in better shape than for the past two years, although some extra work was required on that plowed and then worked immediately before the freezing weather the last of March. Winter wheat and grass and alfalfa are making a rapid growth.

Maximum temperature 82, minimum 29; precipitation .14 inch.

DICKINSON:

The weather continued dry and fair with about normal temperatures. Work in the field continued all week but was very disagreeable on the 15th due to a high wind.

Dickinson, continued:

Tillage operations in preparation for seeding of the rotations were completed and wheat, oats and barley were seeded on the 15th, 16th, and 17th.

Land was prepared for the seeding of the cereal varieties. The first seeding was done on the 17th in the tillage and date-of-seeding experiment with flax and also the rate-and-date test of wheat varieties.

Maximum temperature 82, minimum 14; precipitation .02 inch.

MANDAN:

Agronomy

The past week continued dry. Field work was completed during the week, in readiness for seeding. The soil is very dry and worked up loose. An ordinary wind at the present time will bring up clouds of dust, and a great deal of soil blowing took place during the week owing to the prevalent high winds.

Wheat was seeded in the rotations on April 16. The average date of seeding wheat is April 19. Oats seeding would have been done on the 17th, but an unfavorable day will delay this until early in the coming week.

The soil is so dry that germination of grain cannot take place before rain comes. It is now drier than last year at this time, which was considered the driest spring since the station started.

Prairie fires have been numerous, and some have done considerable damage. Two or three lives have been lost.

Crested wheat grass is now green, and is about 10 days ahead of brome grass. Alfalfa is just starting growth. A seed block of wheat which was planted on March 22 is not yet up.

Maximum temperature 84, minimum 15; precipitation, Trace.

Horticulture

Top working and pruning of fruit trees,has been pushed forward during the week just passed, and wherever possible, the winter mulch has been removed and the orchards cleaned up.

Mandan, continued:

Seedling tomatoes for the breeding project, and eggplant, cauliflower, cabbage, celery, etc., for the garden work, have been transplanted.

Roses have been uncovered, and mulch removed from shrubs in the field and on the grounds. There is apparently but little damage to the flower buds, or other winter injury to the shrubs, so far as can be seen at the present time, but all the hybrid-perpetual roses appear to be entirely dead, and most of the rugosa hybrids appear to be dead to within eight to ten inches from the ground. Last fall was exceedingly dry, and a very scant snowfall received during the winter just passed. It seems probable that the dying of so many of the roses is due to their entering the winter in a dry and weakened condition.

Arboriculture

The shipping of plantings to shelterbelt cooperators began on Wednesday, April 14, and is now well towards completion. Replacements and evergreens will be shipped next week.

ARCHER:

Clear, warm spring weather has prevailed during the week with only a trace of precipitation. During this time plowing with team and tractor has been in progress. The tractor is breaking sod in the south pasture and the team is plowing Dry-Land plats. The preparation of seed and repair of machinery has also been in progress. A new roof on the dairyman's house is nearing completion.

Maximum temperature 73, minimum 49; precipitation, Trace.

NORTH PLATTE:

Extremely dry conditions continue. Temperatures have been somewhat higher. Spring grains seeded a month ago are beginning to emerge but are very spotted. Some areas will not come through until moisture is received. Winter wheat, where not entirely dead, has made some recovery. Weeds are coming on rapidly.

Potatoes on the D. L. A. plats and general fields have been planted during the week.

A motion picture concern, which is making a North Platte film, ran pictures on some of the station live stock on the 15th.

COLBY:

Weather conditions remained fairly favorable for wheat even though no moisture fell. Winter wheat is making some growth, though it is still small. A few fields of barley show a stand, while others just some here and there. The commercial field on the station is showing a fairly good stand. The barley, spring wheat and oats plats are not showing uniform stands yet.

No actual field work was done during the week. The thistles that had blown into the windbreak around the orchard were cleaned out during the week. The orchard was then gone over with the spring tooth harrow. The balance of spring nursery material was seeded on Monday. It is unlikely that a stand from this material will be secured unless it rains soon.

Soil moisture sampling was continued on the eight winter wheat plats.

A trip was taken the last of the week over the four counties in the northwest corner of Kansas. Winter wheat is about normal in these counties for this time of the year. In most of the continuous cropped fields moisture could be used advantageously at any time now.

Peach trees came into full blossom the last of the week.

A few shrubs were planted during the week. An effort is being made to get bluegrass started on the new lawn. There has been unfavorable weather for this so far.

HAYS:

During the first part of the week the weather was very damp. It did not rain very much but just often enough to keep the surface soil wet and sticky so that it was impossible to do any field work worth while. The last three days have been clear and warm; especially have the last two days been warm. The ground is just getting dry enough to work nicely.

Winter wheat looks fine on all early prepared plats; if there is anything wrong with it, the growth is too heavy. It is very thick and now commencing to joint. The wheat is much lighter on the late fall plowing, disking, stubbling in, and plats where the stubble has been burned off and drilled. The wheat is both thinner in stand and less vigorous. The poorest stand is on the late plowing. The poorest growth and most backward is that on a continuously stubbled-in or disked plat, which has not been plowed since 1912.

Hays, continued:

Alfalfa recently sown is coming up nicely, and a fine stand of brome grass sown five weeks ago is up and looking good. Unusually good rains during February and March together with the absence of any wind of a damaging nature has made it possible to work down the ground and seed earlier than usual without danger of causing soil blowing. Although there is no moisture to brag about in the subsoil, there is an abundance of moisture in the first two feet, and the surface soil is in excellent condition.

The warm weather during February and early March, mentioned in previous report, produced a good stand of weeds, most of which were killed by the continuous freezing weather during the latter part of March. This made unnecessary any early cultivation for weed control. However, there is now another good crop of weeds coming up.

During all the time when the ground was sufficiently dry the work has consisted largely in a continuation of trimming of small grain plats and clearing the roads. The remainder of the time has been used in general repairs and preparing a new set of labeled stakes for the plats.

Work on the general farm has been largely general repairs and building, and packing nursery stock for shipment.

The annual round-up program on the station will be May 1. A large attendance is expected.

GARDEN CITY:

We have had ideal spring weather the past three days. Earlier in week the sky was cloudy most of the time. A total of .45 inch of moisture was received.

Winter wheat has made a rapid growth and is now beginning to joint on some of the fallows.

Moisture samples taken on M. C. winter wheat showed a rather dry soil below the second foot.

The spring small grains have emerged to a good stand.
Maximum temperature 86, minimum 29; precipitation .45 inch.

DALHART:

There has been quite an assortment of weather during the past week. It has ranged from mid-winter to summer weather. At the writing of the last report it was snowing. This precipitation amounted to 1.33 inches of water. The greatest depth taken on the ground was 7½ inches. The temperature during this wintry spell was 28 for minimum. The snow lasted for several days, going into the ground as it melted.

The fields are in excellent condition at this writing for working. They have been too wet to work until today. The stalk cutter is operating today, cutting cotton and milo stalks, in preparation for plowing. The plows will be started just as soon as the stalk cutting is finished. Some tree pruning was done this week. Hauling of brush from the trimmings, vineyard, hedges, etc., was also accomplished. A lane was built along the north end of the station which connects the station pasture with another pasture of 110 acres, which has been donated for pasturing station stock. This strip lies on the east side of the station and has excellent grass, not having been pastured for several years. This makes 150 acres of pasture available.

Winter wheat is making excellent progress. At this writing it is about 8 inches in height and jointing. The winter rye is about 4 to 6 inches in height and jointing. Oats that were planted on February 12 emerged noticeably by March 15. At this writing there has been a considerable increase in germination. The stand is excellent and a good growth is starting. The height at this time is approximately 2 inches. The small grain plats, excepting oats, were fenced last fall to protect the plats from rabbit damage. These fences have proven to be quite valuable in this respect. Heretofore the rabbits have grazed on the plats during the winter until all visable plants were eaten, then they dug the plants out by the roots. The result was a very poor stand and in some cases a total failure. These fences not only protect the plats but act as a good poison lot. The rabbits coming to the pens are easily poisoned. A large number have been killed by poison grain scattered around the plats, this winter and spring. There are still plenty of rabbits to kill.

Maximum temperature 77, minimum 28; precipitation 1.33 inches, snow.

TUCUMCARI:

The snow which fell late last week melted soon and field work was possible most of the week. Soil moisture conditions are unusually favorable, a wheat crop not only being almost assured, but tilth for spring listing and plowing being the best in a number of years. The demand for seed has been unusually heavy, nearly three tons of grain sorghum seed having been sold.

Tucumcari, continued:

Listing of the north field was completed, the M. C. G. plats were disked, lawns and hedges have been raked, and plowing of the May 1 date of seeding test and of the cotton variety and date block is now progressing.

The Early Richmond cherries are in full bloom, with other varieties almost as advanced. In spite of the temperature of 7 degrees the last of March, it now appears that chances for a good cherry crop, with perhaps a fair to heavy apple crop, are good. The freeze apparently did not injure grapes.

Wind velocity has been unusually low the past six weeks, an average of only 2.8 miles existing the past week.

Maximum temperature 75, minimum 32; precipitation .12 inch.
Evaporation .844 inch.

BIG SPRING:

The weather during the past week has remained unusually cool for this time of the year. In fact it has been so cool that very little vegetative growth has taken place. Some farmers have started to plant a little cotton and feed, but it is rather doubtful if good stands will be obtained, because the soil is so cold.

The station work this week has consisted of plowing the orchard, preparing ground for the April 15 date of seeding, and in grinding and mixing feed for the yearlings. The April 15 date of seeding was made on time. The varieties and crops used in the date of seeding work are as follows: Mebane, Rowden, and Burnett cotton; Dwarf milo, Dwarf kafir, Reed kafir, Spur feterita, Common feterita, Sumac, and Sudan grass.

Mr. Barnes, Beef Cattle Specialist of Texas A. & M., was a station visitor, April 13.

Maximum temperature 82, minimum 34; precipitation .28 inch.

LAWTON:

Although the temperatures varied from 78 to 32, it was mostly cold and partly cloudy during the week. The ground dried slowly and field operations were prohibited until Friday.

Small grains, grasses, and weeds are all making considerable growth Some of the winter barley varieties are heading to a small extent. The sweet clover nursery which was planted on the 8th is germinating very nicely. Corn planted March 26 is emerging with good indications of a satisfactory stand.

Lawton, continued:

The first date planting of grain sorghums, forage sorghums, and cotton were planted April 17. The M. C. sorgo and broom corn plats were also planted this date.

WOODWARD:

The fore part of the week was cool and cloudy with several frosty nights, the latter part was clear and considerably warmer, with a maximum temperature of 85 degrees. Wheat and rye have made a rapid growth.

About 150 grape vines, consisting of about 35 new varieties and a few old ones for pollenators and checks were planted early in the week. The ground was prepared and the first dates of the planting corn variety test and the sorghums was planted on the 15th. The CC and rotation corn plants were also planted. Corn has also been planted on the dairy farm on the land that is to be used later for pasture plats. Some sweet clover has also been sown. Most of the peach trees have been pruned. As there is practically no fruit, many of them which were in bad shape were pruned very severely so as to renew a large part of the tops.

There is a 50-acre alfalfa field east of town of which about 15 acres are badly infected with pea aphis and about 5 acres of this have been so heavily infested that it is killed to the surface of the ground. The writer has spent considerable time in this field experimenting with various liquid and dust sprays. The cool weather in connection with stiff breezes makes it very difficult to get any beneficial results from any of the 4 kinds of dusts experimented with, even when dragging a canvas to confine the dust. The best results to date have been from the use of a 1% oil emulsion spray, using 6 nozzles spaced 2 feet apart so that the whole surface is covered. Two 12-foot slats about 1 foot apart are fastened so that they set on edge directly beneath the nozzles. These brush the alfalfa down and brush off many of the aphis that would not otherwise be hit by the spray. It is very difficult to force the spray clear to the crowns of the alfalfa where it has a growth of a few inches.

With recent precipitation and warm weather of the past few days wheat is making wonderful growth. There is little, if any, injury due to late freezes.

Maximum temperature 85, minimum 30; precipitation .98 inch.
Evaporation .921 inch. Average hourly wind velocity 6.6 miles.

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WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

REPORT FOR WEEK ENDING APRIL 24, 1926.

HAVRE:

The past week was windy and rather cold. Slight soil blowing occurred on two days but not enough to cause much damage.

All land is now ready for seeding. Plats are being staked out today and seeding should start early next week.

Grass made but little growth although there is plenty of moisture in the subsoil. Showers are needed to start grass. The trees are slowly showing leaf.

Three variety plantings were made with farmers in different parts of this county during the week. Three of the leading varieties of wheat, oats, and barley were used. The chief object is to check the station yields. The county agent is also cooperating and will use these plats for demonstration during the season.

Maximum temperature 78, minimum 36; precipitation .01 inch.

JUDITH BASIN:

Aside from a light snow on April 22, no precipitation has been received and the weather has continued moderately warm. Strong, warm southwest winds during the fore part of the week dried the soil very rapidly. There is the unusual danger, for the Judith Basin, of the ground becoming too dry for seed to germinate. High northwest winds during the latter half of the week have caused more or less soil blowing, and on some fields the winter wheat has again been cut off to the surface of the ground. The dry, windy weather has been unfavorable to winter wheat, and unless moisture is received in the next few days, a number of fields which are in a doubtful condition will have to be reseeded.

Winter wheat on several of the continuously cropped and green manure plats is still in a very doubtful condition, and it may be necessary to reseed a few plats. Winter wheat on fallow and disked corn stubble plats has continued to make a good growth. Winter rye remains quite backward and is not as far advanced as winter wheat. All hay crops and pasture grasses have made a very rapid growth. Boxelder and poplar trees are commencing to leaf out and caragana is budding.

Judith Basin, continued:

Scraping of wind-blown soil from various rotation plats has been completed and all except the corn stubble and fallow plats have been double-disked. Seeding on the cereal project is well under way and about one-third of a 50-acre commercial field has been plowed. Other field work has consisted chiefly of fencing, raking and burning weeds on the new cattle blocks.

Maximum temperature 72, minimum 26; precipitation .2 inch.

HUNTLEY:

Field work during the past week has consisted of planting flax, alfalfa, sweet clover and brome grass in the rotations and small grains in the miscellaneous experiments and variety tests. Spring wheat and oats planted on the 12th and 14th of the month have come up, while peas and barley planted a few days later are beginning to come through the ground. Russian thistles are flourishing on land not recently cultivated and present indications are that the thin stands of winter wheat will not be able to compete successfully with the weeds in the plats.

Alfalfa and brome grass are making a slow growth and show the need of moisture. Soil samples on land other than that fallowed last year revealed sufficient moisture in the seed bed to germinate grains but not much in reserve.

Maximum temperature 82, minimum 28; precipitation 0.

SHERIDAN:

Field work has been possible throughout the week. The last few days, however, have been rather cold, with traces of snow and rain and high winds at times. Some soil blowing took place April 23.

All early seedings of small grains in plats, field peas, brome, alfalfa, and sweet clover have been completed. All early vegetation is making a good growth. Small grain in the rotation field emerged late in the week. The surface of the ground is becoming quite dry and a good rain would be of great benefit now.

Maximum temperature 76, minimum 28; precipitation .04 inch.

MANDAN:

Agronomy

The past week has been dry, with several days of high winds. Soil blowing has taken place on all fields, but nothing has blown out in the rotation plats.

Mandan, continued:

Oats was seeded in the rotation plats on the 19th. Bromegrass, sweet clover and peas were planted on the 20th.

A seed block of wheat, which was seeded on March 22, is partly up.

Fifteen acres in field P have been worked down, and are ready for seeding. Several small blocks of oats have been put in for feed.
Maximum temperature 82, minimum 30; precipitation .04 inch.

Cooperative Grazing Experiment

Native vegetation is starting very slowly. There is very little new feed on the prairie at present. Crested wheat grass is large enough for grazing at the present time.

Professor Shepperd, of the Agricultural College, stopped between trains on the 23rd, and went down on the river bottoms to look over the cattle for this year's grazing work.

Horticulture

The new plant frames, added to and heated from the greenhouse, are now fully occupied. Transplanting of tomato selections, numbering 5,200 plants, has been completed during the week.

The first seeding of vegetables, including parsnips, onions, carrots, spinach, lettuce, radishes, and smooth peas, was made on the 13th and 14th. The ground is very dry and the prospects for good germination are rather poor at the present writing.

Pruning of shrubbery on the grounds has been started. There is but little winter injury apparent. The Chinese apricot (P.armeniaca) is the first shrub to bloom on the campus, and makes a nice showing at the present time. The blossoms, rather small and delicately pink, completely cover the bush.

Arboriculture

Shipment of shelterbelt trees has practically been completed. Trees have been sent out for 208 new plantings; 148 replacements, 5 additional plantings and 35 coniferous plantings. Approximately 153,000 deciduous trees and 6,000 evergreen trees were used. Shipping started on April 14 and was completed on April 24, a total of ten work days being taken for this job.

ARCHER:

The first three days of the week were warm and pleasant. During the night of April 20 a heavy rain occurred with a total of 0.82 inch of precipitation. Following this rain the weather was squally and cold. Today is bright with a rising temperature.

The breaking of sod has continued during the week when the weather would permit. Most of this land has been double-disked. The rain stopped the plowing of the Dry-Land plats. Only four plats in the established rotations remained to be plowed. The seed for most of the plats and fields has been prepared.

The dairy cows were turned out to pasture April 21. The grass is farther along than it has been for several years.

A new evaporation tank was installed April 21. The old tank was so badly rusted that it proved unreliable.

Maximum temperature 71, minimum 28; precipitation .83 inch.

AKRON: Week ending April 17.

The weather has been warm and winter wheat has made slow but appreciable progress. There is moisture in the soil but not such a quantity as to enable the wheat to stool and hide the ground.

Field work progressed satisfactorily. The Rotation and Sheep Rotation corn plats were plowed and packed. A small area of Colburt and of Kanota oats was seeded on bean ground for increase. Small areas of White Smyrna barley and of White Smyrna barley Selection 05 were seeded on fallow for increase. The White Smyrna carries C.I. No. 2642.

Professor Morton and Mr. E. J. Maynard, of the State College, visited the station on Thursday.

Maximum temperature 78, minimum 27; precipitation 0.

AKRON:

High winds and soil drifting characterized the past week. Monday there was a hard wind from the southeast which held sway all day, causing moreor less soil movement in this particular region. Tuesday the wind was heavy, this time from the northwest. Saturday, all day, another heavy northwest wind, during which streams of soil came onto the station from commercial fields to the west and north. Were it not for the trees and the new woven wire fencing on the north and west, it is doubtful if the station soil could have been held without wholesale listing of experimental plantings. The west fence line, acting as a trap, has accumulated some 18 inches of soil.

Akron, continued:

Much time was spent cultivating among the trees and on the open fallow strips to check blowing and to trap the soil drifting on to the station.

Professor Kezer and Mr. Robertson, of the State College, were here during the week at which time Mr. Robertson took spring count on the nursery and seeded the spring grain nursery. On Monday, Mr. Bruce Thornton, of the State College, was here planting smut and rust nursery.
Maximum temperature 83, minimum 35; precipitation .04 inch.

NORTH PLATTE:

Weather conditions have been exceedingly variable during the week. A destructive wind blew from the south all day Monday, blowing the soil very badly. This continued through Tuesday with somewhat less force. All possible land on the table was cultivated during Tuesday. Thursday was warm and calm. Showers and high wind from the north occurred on Friday. Today, Saturday, April 24, the north wind continues without the showers. The amount of soil blowing rivals that of March 24, which was among the worst ever experienced in this section. The .25 inch rain received yesterday seems to have entirely disappeared. The rainfall deficit since January 1 amounts to 61 per cent of the normal precipitation.

In spite of the adverse conditions, spring grains have emerged with fair stands. Winter wheat continues to fight a losing game. Pastures have made but little growth.

COLBY:

Winter wheat made quite rapid growth during the week. On summer fallow and on the better of the continuous cropped plats the wheat is starting to joint. There is some indications that the wheat will shortly start to show the lack of moisture if it does not rain soon. Wheat covers the ground now on summer tilled land.

The spring grains are, for the most part, showing a good stand. Some of the plats are going to have a rather spotted stand.

Weeds are starting now and a rain of 0.26 inch is giving them a good germination and a good start. Plats that were fall worked for corn or for milo were worked during the week.

Colby, continued:

All plats were trimmed to size during the week. Work was started on roads to get them in good condition.

One of the tenant cottages is being renovated at the present time. All of the walls were painted and the woodwork was painted and varnished. New floors are in the process of being laid at the present time.

Weather remained cloudy and only fairly warm during the week.

HAYS:

Generally the weather has been clear, dry and moderate in temperature. The temperature has ranged from a maximum of 79 to a minimum of 30, with a heavy frost one night. Precipitation amounted to .04 inch. There has been but little wind until today, (Saturday), however, there has been sufficient today for the whole week. A very heavy northwest wind has been going since early morning, and the air has been filled with blow soil during the whole time. There is a very dry area about 60 or 70 miles northwest from Hays where there has been but little rain since last July, and it is presumed the soil in the air is coming from that locality.

Although there is apparently plenty of moisture in the surface soil, the wheat on the better prepared plats where the growth is so heavy has been wilting considerably during the last two days. Rye, which is ten to twelve inches high, is wilted and rolled very badly. This is likely due more to the fact that the growth was so rapid and is so tender than to a scarcity of moisture in the soil. Wheat on the stubbled-in or disked ground is very light in growth and of poor color. Soil moisture determinations show these plats to contain as much moisture in the first two feet of soil as the plowed and fallowed plats.

Work during the week has consisted largely in plowing of corn plats and cultivation of roads and alleys, and cutting stalks on borders.

GARDEN CITY:

Growing conditions have been good the past week and the crops are making good use of what little moisture there is in the soil. Winter wheat as well as the spring small grains are making a rapid growth. Alfalfa also is growing rapidly.

Field work this week consisted of listing, plowing, planting potatoes and trimming plats.

Maximum temperature 86, minimum 30; precipitation .35 inch.

DALHART:

Weather conditions have been somewhat unsettled since writing the last report. Just as the fields were getting in shape to work, more rain appeared. The precipitation recorded during this week is 1.50 inches. This was recorded on four days during the week. From the present indications it may rain again at any moment.

Nothing could be done in the field until Friday of this week. The cotton ground was plowed in preparation for the first date variety planting. The drier fields are being plowed today. The field work is very much delayed due to weather conditions but if a few days of fair weather should happen to prevail, considerable headway can be made. Two plows are going today.

Winter wheat and rye are making excellent progress. They are almost knee high at this writing and almost ready to head. Oats are also making rapid growth.

Considerable planting of deciduous and evergreen trees during March, with the favorable growing conditions since, has resulted in almost 100 per cent living. Some hedges were planted, using Chinese Arborvitae seedlings, which were grown here on the station. Out of approximately 500 of these set out, not over a half dozen have died. A good planting of seedling Scotch and Austrian pine was also made from station grown plants. Only two of this planting have failed to live. The remainder are growing in good shape. About 50 Arizona Cypress seedlings were received from Woodward, along with some deciduous trees. Out of this lot not a single one has been lost. All are growing off in good shape. This has been an unusually favorable spring for such plantings.

TUCUMCARI:

Due to precipitation on four days of the week totaling 1.40 inches, field work was possible on only two days.

Odd time work consisted of grinding feed, treating seed grain, grubbing yucca from two fields, scattering poison grain for rats and gophers, rubbing sprouts from young trees, and dragging the road.

Small plats of sweet clover and chamiza were drilled early in the week and plowing of the seven acre variety grain sorghum block will be completed today.

Ideal soil moisture conditions make farmers impatient to start planting and, no doubt, many will start the first of the week. However, the soil is so cold that it would no doubt be wiser to delay this work at least another week.

Tucumcari, continued:

Ranges are rapidly improving and wheat is growing exceptionally fast, jointing being noticeable in some fields.

Since 1905 to 1926, March and April rainfall of 5.08 inches has been exceeded in only one year, 1917.

Maximum temperature 79, minimum 43. Evaporation 1.25 inches.
Average wind velocity, 5.3 miles per hour.

BIG SPRING:

Two rains, totaling 1.08 inches, prevented very much field work until the latter part of the week. The rains coming at this time were very beneficial, as they will insure plenty of moisture for planting purposes, and will also be of great help to the winter wheat, which was beginning to show signs of wilting.

The April 15 date of seeding of Milo and Sudan grass is up to a good stand, but the other sorghums of this planting date are just breaking through the ground.

Work this week has consisted mainly of plowing under wheat, in roadways and along fence rows, that had been sown to hold the soil from blowing. Alleys between the wheat plats were cleaned out. Other work has consisted of removing the plaster from the ceiling of the office. Part of the plaster had fallen down, so the rest was removed and a sheet rock ceiling put up.

Maximum temperature 90, minimum 46; precipitation 1.08 inches.

WOODWARD:

The first part of the week was cloudy and mild with temperatures ranging from 83 degrees on the 18th to 36 on the 19th. Two light showers occurred on the 21st and 22nd of .08 and .06 inch, respectively.

Wheat has been growing very rapidly during the past week and rye is beginning to show a few heads. Practically all varieties of grapes are beginning to show growth.

Work for the week consisted of plowing, disking, hauling manure, pruning trees, hoeing, and some cotton was planted on the 20th.

Mr. C. C. Thomas, of the Office of Foreign Seed and Plant Introduction, Washington, D. C., visitied the station on the 22nd.

Maximum temperature 83, minimum 36; precipitation .14 inch.
Evaporation 1.297 inches. Average hourly wind velocity 6.5 miles.